

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows, without prejudice or disclaimer. This claim listing replaces all prior claim listings.

1. (Previously amended) An expression vector for expressing carcinoembryonic antigen (CEA) in a cell, the vector comprising the nucleic acid molecule of SEQ ID NO.: 28.
2. (Original) The expression vector of claim 1 wherein the vector is a plasmid or a viral vector.
3. (Original) The expression vector of claim 2 wherein the viral vector is selected from the group consisting of poxvirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
4. (Previously presented) The expression vector of claim 3 wherein the poxvirus is selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
5. (Previously presented) The expression vector of claim 4 wherein the poxvirus is selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
6. (Previously presented) The expression vector of claim 1 further comprising at least one additional nucleic acid encoding a tumor-associated antigen.
7. (Original) The expression vector of claim 6 wherein the vector is a plasmid or a viral vector.
8. (Original) The expression vector of claim 7 wherein the viral vector is selected from the group consisting of poxvirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
9. (Previously presented) The expression vector of claim 8 wherein the poxvirus is selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
10. (Previously presented) The expression vector of claim 9 wherein the poxvirus is selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
11. (Original) The expression vector of claim 1 further comprising at least one nucleic sequence encoding an angiogenesis-associated antigen.
12. (Original) The expression vector of claim 11 wherein the vector is a plasmid or a viral vector.

13. (Original) The expression vector of claim 12 wherein the viral vector is selected from the group consisting of poxvirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
14. (Previously presented) The expression vector of claim 13 wherein the poxvirus is selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
15. (Previously presented) The expression vector of claim 14 wherein the poxvirus is selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
16. (Original) The expression vector of claim 6 further comprising at least one nucleic sequence encoding an angiogenesis-associated antigen.
17. (Original) The expression vector of claim 16 wherein the vector is a plasmid or a viral vector.
18. (Original) The expression vector of claim 17 wherein the viral vector is selected from the group consisting of poxvirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
19. (Previously presented) The expression vector of claim 18 wherein the poxvirus is selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
20. (Previously presented) The expression vector of claim 19 wherein the poxvirus is selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
21. (Original) The expression vector of claim 1, 6, 11 or 16 further comprising at least one nucleic acid sequence encoding a co-stimulatory component.
22. (Previously presented) The expression vector of claim 21 wherein the vector is a plasmid or a viral vector.
23. (Previously presented) The expression vector of claim 22 wherein the viral vector is selected from the group consisting of poxvirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
24. (Previously presented) The expression vector of claim 23 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.

25. (Previously presented) The expression vector of claim 24 wherein the poxvirus is selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
26. (Previously amended) A composition comprising an expression vector comprising the nucleic acid sequence of SEQ ID NO.: 28 and a pharmaceutically acceptable carrier.
27. (Previously presented) The composition of claim 26 wherein the vector is a plasmid or a viral vector.
28. (Previously presented) The composition of claim 27 wherein the viral vector is selected from the group consisting of poxvirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
29. (Previously presented) The composition of claim 28 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
30. (Previously presented) The composition of claim 29 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 31-35. Canceled.
36. (Previously amended) An isolated DNA molecule comprising the nucleic acid sequence of SEQ ID NO.: 28.
37. Canceled.
38. (Previously amended) An expression vector comprising the nucleic acid of SEQ ID NO: 28.
39. (Previously presented) The expression vector of claim 38 further comprising a nucleic acid sequence encoding a co-stimulatory molecule.
40. (Previously presented) The expression vector of claim 39 wherein the co-stimulatory molecule is human B7.1.
41. (Previously presented) The expression vector of claim 38 further comprising a nucleic acid sequence encoding at least one additional tumor-associated antigen.
42. (Previously presented) The expression vector of claim 38 further comprising a nucleic acid sequence encoding at least one angiogenesis-associated antigen.
43. (Previously presented) A composition comprising an expression vector of any one of claims 38-42 in a pharmaceutically acceptable carrier.

44. (Previously amended) An isolated nucleic acid molecule comprising the nucleic acid sequence of SEQ ID NO: 28.
45. (Previously amended) An isolated nucleic acid molecule comprising a CEA-encoding nucleic acid sequence including at least nucleotides 421-1490 of SEQ ID NO.: 28.
46. (Previously presented) The isolated nucleic acid molecule of claim 44 or 45 further comprising a nucleic acid sequence encoding a co-stimulatory molecule.
47. (Previously presented) The isolated nucleic acid molecule of claim 46 wherein the co-stimulatory molecule is human B7.1.
48. (Previously presented) The isolated nucleic acid molecule of claim 44 or 45 further comprising a nucleic acid sequence encoding at least one additional tumor-associated antigen.
49. (Previously presented) The isolated nucleic acid molecule of claim 44 or 45 further comprising a nucleic acid sequence encoding at least one angiogenesis-associated antigen.
50. (Previously amended) A composition comprising a nucleic acid molecule of any one of claims 44-49 in a pharmaceutically acceptable carrier.
- 51-66. Cancelled